Defense Information Infrastructure (DII)

Common Operating Environment (COE)

Statement of Functionality (SOF)
for the
Java Run-Time (JAVART) Segment

9 August 1999

Prepared for:
Space and Naval Warfare Systems Command
Environmental Systems Program Office
(SPAWAR PMW-185)

Prepared by:
Fleet Numerical Meteorology and Oceanography Center
Monterey, CA

and

Integrated Performance Decisions, Inc.
Monterey, CA

Table of Contents

1   SCOPE

1.1   Identification

This document describes the functionality of the Java Run-Time (JAVART) of the Navy Integrated Tactical Environmental Subsystem (NITES). The JAVART segment provides Java Run-Time libraries used by the Meteorological and Oceanographic (METOC) Database Management (MDBMAN) segment and other applications in the NITES system.

1.2   System Overview

NITES I acquires and assimilates various METOC data for use by US Navy and Marine Corps weather forecasters and tactical planners. It stores these data and products in the METOC Database. NITES I provides users with METOC data, products, and applications necessary to support the warfighter in tactical operations and decision making. NITES I provides data and products to NITES I and II applications, as well as non-TESS(NC) systems requiring METOC data, in a heterogeneous, networked computing environment.

1.3   Document Overview

Section 2 provides a more detailed overview of NITES, while Section 3 contains more detail concerning the specific functionality provided by the JAVART segment.

2 NITES SYSTEM FUNCTIONALITY

The software described in this document forms a portion of NITES. On 29 October 1996, the Oceanographer of the Navy issued a Program Policy statement in letter 3140 Serial 961/6U570953, modifying the Program by calling for five seamless software versions that are DII COE compliant, preferably to level 5.

The five versions are:

- NITES Version I   The local data fusion center and principal METOC analysis and forecast system

- NITES Version II   The subsystem on the Joint Maritime Command Information System (JMCIS) or Global Command and Control System (GCCS) (NITES/Joint METOC Segment (JMS))

- NITES Version III   The unclassified aviation forecast, briefing, and display subsystem tailored to Naval METOC shore activities (currently satisfied by the Meteorological Integrated Data Display System (MIDDS))

- NITES Version IV   The Portable subsystem composed of independent Personal Computers (PCs)/workstations and modules for forecaster, satellite, communications, and Integrated Command, Control, Communications, Computer, and Intelligence Surveillance Reconnaissance (IC4ISR) functions (currently the Interim Mobile Oceanographic Support System (IMOSS))

- NITES Version V   Foreign Military Sales (currently satisfied by the Allied Environmental Support System (AESS))

NITES I acquires and assimilates various METOC data for use by US Navy and Marine Corps weather forecasters and tactical planners. NITES I provides these users with METOC data, products, and applications necessary to support the warfighter in tactical operations and decision making. NITES I provides METOC data and products to NITES I and II applications, as well as other systems requiring METOC data, in a heterogeneous, networked computing environment.

3   JAVART SEGMENT FUNCTIONALITY

The JAVART segment provides the runtime environment (Virtual Machine) and class libraries needed by Java applications developed using the Java Development Kit (JDK), version 1.1. This segment contains Java Run-Time Environment (JRE) 1.1.5 class files, Symantec Visual Cafe Professional Development Edition (PDE) native classes, Java Foundation Classes (JFC) from JavaSoft Corp., and Borland JBuilder2 native classes.